

PATENT  
Docket No. 419-06

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: J. Blake Scott Grp./A.U.: 1755  
Appl. No.: 10/037,630 Examiner: Paul D. Marcantoni  
Filed: 01/03/02  
Title: INCORPORATION OF DRILLING CUTTINGS INTO  
STABLE LOAD-BEARING STRUCTURES

Request for Rehearing

This is a request for rehearing of the Board's Decision of 09/01/2009 pursuant to 37 C.F.R. § 41.52. Applicants believe that the following points in the decision have been misapprehended or overlooked by the Board:

Point # 1: Overbroad Construction of Claim 1

On page 5 of its decision, the Board interpreted claim 1 to be met in relevant part by "shaping and sizing the mixture into **any manner** [emphasis added] of load-bearing structure and curing the load-bearing structure." It is respectfully urged that this is not in fact all that claim 1 specifies: The specific shape and size of the load bearing structure *as cured* must also satisfy the rutting resistance specified in part (2.1.2) or (2.2.2) of claim 1. The Board does not point to any part of Polston, or any other prior art, which teaches that forming and curing a mixture in the form of an aggregate, or in any other shape, followed by breaking the cured material into an aggregate, then spreading this aggregate on a base is "equivalent or substantially equivalent" to adding the aggregate, whether cured or not, to a still uncured cementitious mixture, shaping and sizing this mixture into particles before the mixture is cured, and then curing the latter into the load bearing structure actually to be used, to fall within the scope of the claims on appeal. Nevertheless, the Board wrote on page 14 that the process taught by Polston is "identical or substantially identical to the claimed process".

If this is what the Board actually believes, it is respectfully requested to state so explicitly.

Issue 2: Apparently Insufficient Finding of Fact

On page 7 of the decision, the Board found as a fact that “Polston would have disclosed to one of ordinary skill in this art, as illustrated by embodiments depicted in Figure 2, a method for making a road base material by mixing, among other things, oil and gas waste materials, such as well drilling cuttings, aggregate material, and at least one binder.” Appellant does not contest this finding, as far as it goes, but respectfully urges that it is insufficient, because the Board did not find as a fact that Polston (or any other cited prior art) teaches other important limitations of claim 1, i.e., shaping and sizing the load-bearing structure and *subsequently* curing it so that it has the rutting resistance specified in parts (2.1.1) and (2.1.2) of claim 1, for example.

In the Second Supplemental Reply Brief, appellant explained this process difference further as follows:

In Figure 2, above reference number **19**, in the part of the Polston reference cited in this assertion as the impervious layer on which the mixed material is stored during curing, there is plainly visible a multi-lobed shape containing the legend “CURING (48HRS)”, and this multi-lobed shape is not that normally associated with the final “shape and size” of a road. Furthermore, at column 4 lines 38 – 42, Polston contains the following sentence, “The result of the novel process is to provide a novel road base composition which is made up of treated oil and gas waste material and an aggregate and to **apply such composition to a road base location**” [emphasis added]. Therefore, considering the entire reference, it is clear to those skilled in the art that the material made in accordance with the description of column 8 lines 18 – 22 is a particulate aggregate that does not assume its final size and shape as required by pending claim 1 until it is “applied at a road base location” as specified at column 4 lines 41 – 42. Still further, at column 3 lines 26 – 30, Polston states, “The manufactured road base typically is mixed, processed, and likewise **stored** surrounded by an earthen berm and on a cement pad and/or other physical barrier that will prevent leaching of liquid contaminates into the soil” [emphasis added]. A road in its final size and shape is not “stored”; it is already where it belongs.

Note that the road base composition taught by Polston at column 4 lines 38 – 42 is already “cured”, as indicated in Figure 2, and has typically been stored, as indicated at column 3 lines 26 – 30. There is therefore no suggestion in the Polston reference that the final size and shape of the load-bearing structure that it teaches undergoes a pozzolanic or asphaltic cure *after* being put into place as a load-bearing structure, as required by all the pending claims.

In hindsight, as is required by the fact that appellant had no knowledge of the Polston teaching before making the application<sup>1</sup>, appellant believes that this difference in timing of curing is the one of the most practically important distinctions between the invention claimed here and the teaching of Polston.

### Issue 3: Another Apparently Insufficient Finding of Fact or Citation of Art

On page 14 of the Decision, the Board wrote, “[W]e determine that as the Examiner submits, one of ordinary skill in this art routinely following the teachings of Polson would have arrived at a process for constructing road base load-bearing structures ... encompassed by appealed claim 1, even though the claimed rutting resistance property obtained with the claimed process is not expressly taught by Polston.” As noted in the Appeal Brief, “It is clear in the law that when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. See *B.F. Goodrich Co. v. Aircraft Braking Sys. Corp.*, 72 F.3d 1577, 1582, 37 U.S.P.Q.2D (BNA) 1314, 1318 (Fed. Cir. 1996). The examiner here at most showed, and the Board apparently accepted, only the *possibility* of making such a modification. To support a finding of *prima facie* obviousness, “The teaching or suggestion to make the claimed combination **and the reasonable expectation of success** [emphasis added] must both be found in the prior art, not in applicant's disclosure.’ *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).” MPEP 2143. Also, further from the appeal brief, “It has been held that that which may be inherent is not necessarily known and that obviousness

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<sup>1</sup> This reference was published well after the filing of the application at issue here, but it was filed earlier and therefore may be a proper reference under 37 USC 102(e).

cannot be predicated on what is unknown[.], *In re Spormann*, 150 USPQ 449, 452 (C.C.P.A. 1966)”, and neither the examiner nor the Board has ever cited any evidence that it was known in the prior art that *any* measurement of compressive strength could be correlated with rutting resistance, except in the special case of *continuous* pavement layers. Also see footnote 1 of the Little Declaration of record. Furthermore, “It is never appropriate to rely solely on “common knowledge” in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based. *Zurko*, 258 F.3d at 1385, 59 USPQ2d at 1697 ... As the court held in *Zurko*, an assessment of basic knowledge and common sense that is not based on any evidence in the record lacks substantial evidence support. *Id.* at 1385, 59 USPQ2d at 1697. See also *In re Lee*, 277 F.3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002) (In reversing the Board’s decision, the court stated “‘common knowledge and common sense’ on which the Board relied in rejecting Lee’s application are not the specialized knowledge and expertise contemplated by the Administrative Procedure Act.” MPEP 2144.03.

#### Issue 4: Arguments Against the Pertinence of Some Authorities Applied by the Board

With the correct construction of the pending claims as outlined above, it is believed and respectfully urged that none of the following authorities applied by the Board is apposite as applied:

*Spada* does not apply because the PTO has not shown “sound reason for believing that the products [or processes] of the applicant and the prior art are the same.”

*Skoner* does not apply because the method is not “clearly obvious in view of the references.”

*Merck & Co., Inc. v. Biocraft Labs., Inc.* does not apply because the claims here are to processes, not to “formulations”, and the reference does not disclose the same processes.

*In re Boesch* does not apply here until and unless it is shown that there was knowledge in the prior art that controlling compressive strength would lead to rutting resistance.

*In re O'Farrell* does not apply here because according to MPEP Section 2143.02, "The court held the claimed method would have been obvious over the prior art relied upon because one reference contained a detailed enabling methodology, a suggestion to modify the prior art to produce the claimed invention, and evidence suggesting the modification would be successful," and these conditions are not met in this instance.

#### Issue 5: Rebuttals of Other Arguments in the Opinion

On page 15 of the Decision, the Board writes, "We disagree with Appellant's position that one of ordinary skill in the load-bearing structure arts, inclusive of civil engineers of ordinary skill, would not have reasonably have expected to arrive at the claimed resistance to rutting property specified in claim 1." This is not only the Appellant's position, but that of Declarant Little as well: "This reference [Polston] can not give a civil engineer of ordinary skill any reasonable expectation the rutting or plastic deformation resistance required by the pending claims can be achieved by following the teachings of this reference." (p. 4 – 5 of the Declaration). The Board apparently believes that its knowledge of the ordinary skill of persons in the load-bearing structure arts is greater than Dr. Little's. In view of Dr. Little's eminent qualifications, this appears to be a dubious conclusion, particularly in view of the statements of Dr. Little on pages 2 – 3 of the Declaration that at least three things would be required to give a civil engineer of ordinary skill such reasonable expectation. None of these things is in the Polston reference, and no prior art, excluding the specification whose claims are here on appeal, has ever been cited to show that a person of ordinary skill would know the specific correlations between rutting resistance and compressive strength, layer thickness, and resilient moduli of all the layers in the road as taught in the specification and claimed in claims 12, 14, and 15. Without a teaching of these correlations, there is no reasonable expectation of success.

See *B.F. Goodrich Co. v. Aircraft Braking Sys. Corp.*, 72 F.3d, 1577, 1582, 37 U.S.P.Q.2D (BNA) 1314, 1318 (Fed. Cir. 1996) *supra* (cited in the Appeal Brief).

Instead the Board has used the teachings of the specification to guide a search of the prior art in the correct direction. This is contrary to precedent: The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991), *supra* (cited in Appeal Brief). The fact that the testing methods are known in the art is not helpful until one knows what and what value(s) to test for.

"Appellant does not argue that a road base exhibiting the claimed resistance to rutting property cannot be obtained by routinely following Polston's process for constructing a road base load-bearing structure that incorporates drilling cuttings in a particulate mixture and employing *compress [sic] strength testing methods* as directed by Polston". Decision at page 16. If the modifying phrase "as directed by Polston" is restricted to modifying "test methods", and if "routinely" includes making and testing every possible variation of compressive strength, with unlimited time available<sup>2</sup>, this statement may be correct.

However, it is respectfully urged to be legally irrelevant, as indicated by the following quotation from the MPEP, Section 2143.01:

A statement that modifications of the prior art to meet the claimed invention would have been " 'well within the ordinary skill of the art at the time the claimed invention was made' " because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levensgood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). See also *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1318 (Fed. Cir. 2000) (Court reversed obviousness rejection involving technologically simple concept because there was no finding as to the principle or specific understanding within the knowledge of a skilled artisan that would have motivated the skilled artisan to make

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<sup>2</sup> It is widely believed, for example, that a monkey given a typewriter, an endless roll of paper properly positioned in the typewriter, and infinite time is sure to write the works of Shakespeare eventually.

the claimed invention); *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999) (The level of skill in the art cannot be relied upon to provide the suggestion to combine references.).

In its argument for sustaining the examiner's rejection and/or entering its own rejections of claim 6 and 11, claim 7, and claims 12, 14, and 15, the Board continued to use the disclosure of the specification containing the claims on appeal as its guide to the prior art. For the reasons already given, this is believed to be inconsistent with precedent and therefore should be withdrawn upon reconsideration.

Should any fees be due for entry and consideration of this Request for Rehearing that has not been accounted for, the Commissioner is authorized to charge them to Deposit Account 160750.

Respectfully submitted,

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